Department of Defense—U.S. Navy
Naval Research Laboratory (NRL)

High Speed, Ultrastable, Fiber-Optic Communications Laser

A team at NRL has developed an advanced fiber-optic laser that generates ultrashort pulses of light. Because pulsed laser light is used to carry digital information, the ultrastable, ultrafast NRL fiber laser technology enables—among other things—development of next-generation communications systems. In addition, this patented technology can be used for radar systems and other applications such as navigation and surveillance.

The team has successfully transferred the laser by establishing licensing partnerships with two companies, PriTel, Inc. and Calmar Optcom. The primary results of the technology transfer efforts are the numerous products that are being manufactured and sold under the NRL licensing agreements. To date, four models of optical clocks, three optical transmitters, and two high-power polarization-maintaining fiber amplifiers are on the market.

Advances in communication via telephone, local networks or the Internet as a result of this technology will benefit any business or activity that relies on the exchange of information, including banks and financial service providers, hospitals, government agencies, distance education programs, and the military.

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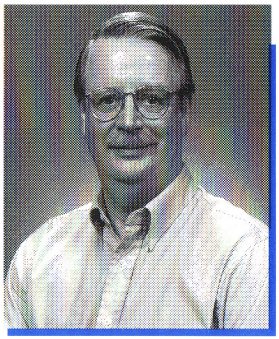

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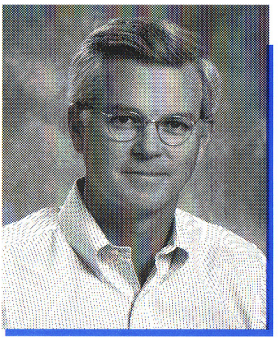

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